

REQUEST FOR RECONSIDERATION

Claims 1-8 remain active in this application.

The claimed invention is directed to a silicone-containing detergent composition which is useful as a shampoo composition.

Applicants wish to thank examiner Boyer for the helpful and courteous discussion held with their U.S. representative on October 16, 2006. At that time, applicants' U.S. representative argued that the prior art failed to disclose or suggest the claimed component (C) a silicone derivative having **a group** containing **both** a hydroxy group and a nitrogen atom **as a side chain** bonded to a silicon atom. The following is intended to expand a discussion with the examiner.

Shampooing detergent compositions having a hair conditioning effect have not provided entirely satisfactory results. Accordingly, detergent compositions which can provide a conditioning effect to hair are sought.

The claimed invention addresses this by providing a detergent composition comprising an anionic surfactant, a water-soluble cationized polymer and a silicone derivative having a group containing both a hydroxy group and a nitrogen atom as a side chain thereof bonded to a silicon atom. Applicants have discovered that such a silicone derivative in combination with an anionic surfactant and water-soluble cationized polymer provides for a detergent composition having a good foaming properties and excellent conditioning effects. Such a detergent composition is nowhere disclosed or suggested in the cited prior art of record.

The rejections of claims 1-8 under 35 U.S.C. § 103(a) over Doi U.S. 6,923,9054 and Visscher et al. U.S. 5,154,849 are respectfully traversed.

None of the cited references disclose or suggests applicants' claimed silicone derivative having a group containing both a hydroxyl group and a nitrogen atom as a side chain thereof bonded to a silicon atom.

Doi et al. is directed to a hair conditioner composition comprising a tertiary amine of formula (I) (col. 1, lines 46-56). The conditioner composition may further comprise an oily component such as a higher alcohol, an ester oil, a silicone, a light liquid isoparaffin, a light liquid paraffin, paraffin, wax, squalene, and glycerides (col. 3, lines 17-23).

Suitable silicone compounds are identified at column 3, lines 57-67 as (A) dimethylpolysiloxane, (B) methylphenylpolysiloxane, (C) amino modified silicone, (D) fatty-acid modified polysiloxane, (E) alcohol-modified silicone, (F) aliphatic alcohol modified polysiloxane, (G) polyether-modified silicone, (H) epoxy-modified silicone, (I) fluorine-modified silicone, (J) cyclic silicone, (K) alkyl-modified silicone, and (L) amino-modified siloxane-polyoxyalkylene block copolymer. None of these compounds are a silicone derivative having **a group containing both** a hydroxyl group and a nitrogen atom **as a side chain** bonded to a silicon atom.

A silicone derivative as claimed has bonded to a silicon atom, a side chain group which contains both a hydroxyl group and nitrogen atom. Non-limiting examples of such a group are illustrated on page 6, the substituent R⁴ formulas (2) and (3). As the cited reference fails to disclose or suggest a silicone derivative which has a group containing both a hydroxyl group and a nitrogen atom as a side chain bonded to a silicon atom, the claimed invention is clearly not rendered obvious from this reference and accordingly withdrawal of the rejection under 35 U.S.C. § 103(a) is respectfully requested.

The same deficiency is found in the reference of Visscher et al. which is directed to a mild skin cleansing toilet bar comprising about 0.5-20% of a silicone component which consists of a mixture of a silicone gum and a silicone fluid at a specified ratio (col. 2, lines

53-61). The essential component is a silicone blend which consists of a silicone gum and a silicone fluid (col. 3, lines 44-47), polyalkylsiloxanes such as polydimethylsiloxane (col. 3, lines 67-68) are described. Further, a polysiloxane with an amino functional substitution for a polyether siloxane copolymer are described at (col. 4, lines 1-5). The siloxane may be **end capped** with any number of moieties including methyl, hydroxyl, ethylene oxide, propylene oxide, amino, and carboxyl (col. 4, lines 5-9). A siloxane which is end capped with a hydroxyl group or an amino group is not a silicone derivative having a group containing both a hydroxyl group and a nitrogen group as a side chain as a capping group is (1) a single substitution and therefor would fail to have both a hydroxyl group and a nitrogen group; and (2) would not be as a side chain bonded to a silicon atom but rather would be a capping group to the polymer backbone. Thus, the reference clearly fails to disclose or suggest the claimed silicone derivative having a group containing both a hydroxyl group and a nitrogen atom as a side chain bonded to a silicon atom.

In contrast, the claimed invention is directed to a detergent composition in which a silicone derivative has **a group containing both** a hydroxy group and a nitrogen group **as a side chain**. The hydroxy group and a nitrogen atom must be part of the same group and occur as a side chain thereof bonded to a silicon atom. Since the prior art fails to disclose or suggest a side chain group which contains both a hydroxy group and a nitrogen atom, the claimed invention is clearly not rendered obvious from this reference and accordingly withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

Applicants submit this application is now in condition for allowance and early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon



Richard L. Chinn, Ph.D.
Attorney of Record
Registration No. 34,305

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 03/06)

NFO/RLC/law